

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

As a preliminary matter, the Examiner indicates in paragraph 1 of the Office Action that the Information Disclosure Statement papers filed on November 8, 2002 have been considered. Unfortunately, the Office Action did not include an initialed copy of the PTO-1449 form submitted with that Information Disclosure Statement. A copy of same is requested in the next Office Action.

Claim 6 stands rejected under 35 U.S.C. §112, second paragraph. Applicants have canceled claims 1-10, and submitted new claims 11-33. The new claims do not narrow or surrender any subject matter recited in the original claims 1-10.

All claims stand rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent 6,658,653 to Bates, in view of U.S. Patent 5,182,083 to Scheifler et al. This rejection is respectfully traversed.

Bates relates to debugging computer programs by monitoring allocations and deallocations of memory space. The Examiner contends that the time fields in the history table 500 are "equivalent to object information stored for a time period." Bates describes in columns 7 and 8 that an allocation history is provided for a defined *memory space*. The allocation history can be built up by tracking memory allocations and deallocations for that specific memory space. But a memory space alone is not a created object or an information unit. A space defines a location where information can be stored, but it is not

itself information. Thus, Bates's history table and its fields can not viewed as an information unit being stored for an expiration time. The purpose of Bates's history table is to examine how a particular memory space has been managed. See column 8, lines 40-45. Moreover, if the history table was not preserved, and was removed after an expiration time, the history table would not serve or fill its intended purpose to show how the memory space was used prior to the expiration time.

With regard to the step of terminating the program section and removing unallocated objects in memory, the Examiner refers to steps 514-518 in Figure 15. These steps refer to the fact that memory is unallocated and free to be used for storing information. There is no teaching here of terminating the program section or removing unallocated objects that are stored in unallocated free memory. Nor does Figure 15 disclose determining that a created object is completed or inactive.

Bates fails to teach the scanning step of claim 1. The Examiner refers to column 6, lines 46-57, which simply describes the normal allocation and deallocation of memory. Memory is allocated when needed for a process, and when the process is complete, that memory is amount is deallocated and can be used again. Bates states that "over time this will result in working storage containing the series of allocated and free areas." But there is no disclosure or suggestion in Bates of scanning memory for "overdue" objects that have been stored in memory for too long. Bates does not teach that any allocated memory is "forced" to become free (deallocated) because the process accompanying the allocating memory space is completed or is no longer active, but nonetheless is still

blocking the use of that memory. In this regard, steps b and d of claim 1 are simply not disclosed or suggested by Bates. The Examiner seems to belatedly admit this in the second-half of page 3, and relies on the Scheifler reference in an attempt to remedy the deficiencies of Bates. This reliance on Scheifler is misplaced.

Scheifler relates to a database system for multi-entry template matching. Scheifler uses the term "registration time expired" in Figures 8, 15 and 20. But Scheifler's registration time is really a subscription. Scheifler allows a user to register an interest in future addition to the database. See, for example, column 8, lines 36-40. The user supplies a maximum time period during which he is interested to receive updates, i.e., a registration time. It is irrelevant whether there is no, one, or several database additions made during that time period. All or none are sent to the subscriber. In other words, the registration is not removed until the registration time has lapsed, irrespective of how many times the notify query has been matched. The registration time has no functional link to the matching of the query template.

The Examiner appears to be drawing an analogy between the query template and the claimed created object or information segment (although it is not clear). Contrary to what is claimed, there is no indication in Bates that the query template is removed when it is completed or inactive. Instead, the registration time is arbitrary and independent of whether the database query template has been matched. Thus, even if the combination of Bates and Scheifler could be made, for purposes of argument only, that argument still fails to teach all of the features recited in the independent claims.

Also, as already explained, Bates simply allocates and deallocates memory. An information unit is not removed when a created object is complete or inactive. Memory is simply allocated and reallocated as need. Nor does Bates scan the memory to identify information units stored for a time period longer than the expiration time period. Scheifler teaches a database notify query associated with a time out. But claim step (d) does not recite removing of the information unit when the expiration time period is expired. Rather, claim step (d) recites removing the information unit stored in memory "when the created object is completed or inactive." Scheifler does not disclose this in the text or Figures related to the notify query. Nor Scheifler disclose scanning the memory to see whether a notify query has been stored in memory for a time period longer than the registration time. Indeed, there is no scanning. The registration time simply expires, and the notify request query is canceled. There is certainly no teaching in Scheifler (as admitted by the Examiner) that, as a result of scanning the memory and identifying one or more information units having been stored for a time period, an alarm signal is triggered.

In addition, the motivation to combine these references is lacking. Bates invention is used in a debugging environment prior to when the tested software is used in a production environment. In contrast, Scheifler describes a product—a database system—which is being used in a production environment. Any debugging would already have occurred. Scheifler makes no indication of concern about reclaiming deallocated memory space, but rather is concerned with the amount of time that the processor must look for matching queries.

BYSTEDT et al.

Appl. No. 09/827,810

For reasons set forth above, Applicants respectfully submit that the application in now in condition for allowance. An early notice to that effect is earnestly solicited.

Respectfully submitted,

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AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Figs. 2 and 3. This sheet, which includes Figs. 2 and 3, replaces the original sheet including Figs. 2 and 3.

Attachment: Replacement Sheet(s)